MILLER & HOLBROOKE

1225 NINETEENTH STREET, N. W.

WASHINGTON, D. C. 20036

TELEPHONE (202) 785-0600
TELECOPIER (202) 785-1234

MICHAEL D. BERG
WILLIAM W. BURRINGTON***
LARRINE S. HOLBROOKE
ELDRED INGRAHAM**
TILLMAN L. LAY
NICHOLAS P. MILLER
KAREN HOCHSTEIN NEUMAN
BARBARA D. RANAGAN
JILL ABESHOUSE STERN

WILLIAM R. MALONE
OF COUNSEL

BETTY ANN KANE*
FEDERAL RELATIONS ADVISOR

*NOT ADMITTED TO THE BAR
**ADMITTED IN PENNSYLVANIA ONLY
***ADMITTED IN WISCONSIN ONLY

July 29, 1991

RM-7805

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
1919 M Street, NW
Washington, D.C. 20554

Dear Ms. Searcy:

On behalf of Ellipsat Corporation, I am transmitting herewith an original and nine copies of its Petition for Rulemaking requesting amendment of Sections 2.106, 25.141 and 25.201 of the Commission's Rules. Separately and concurrently herewith, Ellipsat is submitting a related request for pioneer's preference and an application for experimental license with respect to its ELLIPSO™ satellite system.

Should there be any questions concerning this matter, kindly communicate with the undersigned.

Very truly yours,

Jill Abeshouse Stern

Jill Abeshouse Stern

JAS:bym
Enclosures
cc: Rodney Small
Tom Tycz
Cecily Holiday
Fern Jarmulnek

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Petition for Rulemaking	)	RM- 7805
of Ellipsat Corporation	)	
to Amend Sections	)	
2.106, 25.141 and 25.201	)	
of the Commission's Rules	)	

PETITION FOR RULEMAKING

Ellipsat Corporation ("Ellipsat"), by its attorneys and pursuant to Section 1.401 of the Commission's Rules, hereby requests amendment of Sections 2.106, 25.141 (previously 25.392) and 25.201 of the Commission's rules, if and as necessary, to allow mobile voice and data services and fixed feeder link operations in the 1610-1626.5 MHz and 2483.5-2500 MHz bands. Ellipsat is submitting, separately and concurrently herewith, a related request for pioneer's preference and an experimental license application.

I.
INTRODUCTION AND BACKGROUND

On November 5, 1990, Ellipsat filed the first application for a low earth orbit satellite system using the RDSS bands. Its application was also the first to propose the use of small low earth orbit satellites to provide combined mobile voice and

position determination services. In its application, Ellipsat introduced its vision of providing nationwide mobile voice and position location services rapidly and cost-effectively to meet existing communications needs.[1] As detailed in Ellipsat's application, the ultimate ELLIPSO™ satellite constellation would consist of twenty-four satellites in a low earth elliptical orbit. Initial service would be introduced through ELLIPSO™ I, consisting of six small satellites. Coverage and capacity would be enhanced, in little more than one year after introduction of commercial service, by eighteen ELLIPSO™ II satellites. A separate application for the enhanced ELLIPSO™ II satellites was filed with the Commission on June 3, 1991.[2]

In its November 5, 1990 and June 3, 1991 applications, Ellipsat claimed a pioneer's preference for the innovative nature of its system design.[3] The ELLIPSO™ system, for example, pioneered the commercial use of elliptical orbits. This orbit maximizes coverage of the United States with a minimum number of satellites. In addition, the system uses state-of-the-art technology in an innovative fashion. Through the use of spread spectrum code division multiple access (CDMA) modulation

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[1] See Application of Ellipsat Corporation, filed November 5, 1990 and Technical Clarification and Erratum, filed January 30, 1991 (FCC File No. 11-DSS-P-91(6)) (hereinafter "ELLIPSO™ I Application").

[2] See Application of Ellipsat Corporation, filed June 3, 1991 (hereinafter "ELLIPSO™ II Application").

[3] See ELLIPSO™ I Application at 3; ELLIPSO™ II Application at 5.

techniques, the ELLIPSO™ system will ensure multiple entry and maximize spectrum utilization. The ELLIPSO™ system features an innovative design permitting transparent interconnection between satellite and terrestrial systems, and integration with the public telephone network.

In Ellipsat's view, a rulemaking is not required to authorize ELLIPSO™.[4] The Commission has authority, under well-established precedent, to permit mobile voice services in the RDSS bands pursuant to a waiver.[5] Not only is the waiver approach fully consistent with Commission precedent, but a waiver would expedite new service to the public in the present case. Although Ellipsat believes that there is abundant justification to proceed without rulemaking, this petition for rulemaking is

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[4] On June 28, 1991, Ellipsat filed a Petition for Partial Reconsideration of the Commission's Report and Order establishing a pioneer's preference. See Report and Order, General Docket No. 90-217, FCC 91-112, released May 13, 1991. In its petition, Ellipsat sought reconsideration of the requirement that a rulemaking petition be filed as a prerequisite to claiming the preference. As detailed in Ellipsat's petition, a rulemaking may in certain cases actually delay introduction of a new technology or service, contrary to the Commission's objectives, by creating a superfluous administrative barrier. See Ellipsat Corporation, Petition for Partial Reconsideration, filed June 28, 1991, at 2.

[5] See, e.g., Qualcomm, Inc., 4 F.C.C. Rcd at 1543, 1544 (1989) (waiver granted to permit mobile satellite services in the fixed satellite service bands); Radiodetermination Satellite Service Second Report and Order, 104 F.C.C. 2d 651,660, 60 R.R. 2d 298,306 (1986) (hereinafter "RDSS Licensing Order"); Rural Cellular Service, 58 R.R.2d 517, 519 (1985); DBS Systems, 92 F.C.C.2d 64, 68 (1982). See also Hye Crest Management, Inc., 6 F.C.C. Rcd 332 (1991) (waiver granted to provide video services using frequencies allocated for point-to-point microwave radio service); Nevada Bell, 3 F.C.C. Rcd 7217 (1988) (waiver granted to use frequencies allocated to the Instructional Television Fixed Service for the provision of basic telephone service).

being filed to ensure that Ellipsat meets the current requirements for claiming a preference.

In this petition, Ellipsat seeks amendment of Commission Rules 2.106 and 25.141 (formerly Rule 25.392), to the extent necessary, to permit mobile voice and data services in the 1610-1626.5 MHz and 2483.5-2500 MHz bands. Ellipsat also requests amendment of Rules 25.201, if and as necessary, to permit location of associated feeder links in those bands. In Ellipsat's view, no other rule amendments would be required to permit operation of its system.[6]

II.
EXPANSION OF PERMISSIBLE SERVICES IN THE RDSS BANDS WOULD SERVE THE PUBLIC INTEREST

Ellipsat seeks amendment of Commission Rules 2.106 and 25.141 to expand the range of permissible services that may be provided in the RDSS bands, to include mobile voice and data services in addition to position determination. The requested amendment would facilitate provision of new publicly beneficial communications services.

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[6] Ellipsat notes that TRW has requested a relaxation in the international power flux density limits applicable to the S-Band. See TRW Inc., Petition for Rulemaking and Request for Pioneer's Preference, filed July 8, 1991,at 11-13. Ellipsat supports this request to relax S-Band flux density limits and agrees that this relaxation would allow an increase in system capacity. Ellipsat believes, however, that market requirements can be met within the constraints of the present flux density limits.

In 1985, the Commission allocated frequencies to the radiodetermination satellite service because it found an "outstanding need" for this type of service.[7] Recent developments, however, indicate that, while RDSS remains a publicly beneficial service, the market for this service has not developed as initially expected. Previously authorized RDSS licensees have relinquished their licenses and the only remaining RDSS licensee, Geostar, has filed for bankruptcy.[8] Nonetheless, there continues to be strong interest in satellite-based position location services, as evidenced by the numerous proposals now pending before the Commission, including Ellipsat's, to offer such services. Indeed, virtually all of the pending applications seek authority to provide both RDSS and mobile voice services in the RDSS bands.

It is Ellipsat's view, shared by many of the applicants, that RDSS standing alone is not a viable service.[9] By permitting RDSS licensees to offer mobile voice and data services in addition to position location, the Commission would provide the economic foundation needed to ensure the continued availability

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[7] See Radiodetermination Satellite Service, Report and Order, 58 R.R. 2d 1416, 1417 (1985) ("RDSS Allocation Order").

[8] On June 28, 1991, Geostar failed to inform the Commission of its intention to comply with the milestones for its dedicated system, as required in Geostar Positioning Corporation, 6 FCC Rcd. 2776 (1991). Its authorization is now presumably subject to cancellation.

[9] See, e.g., ELLIPSO™ II Application at 9-10. See also TRW Inc., Petition for Rulemaking and Request for Pioneer's Preference, filed July 8, 1991, at 9.

of RDSS and to promote a more efficient use of the RDSS bands. Not only would combined voice/RDSS services provide an economic base for RDSS, but provision of mobile voice and data services would otherwise serve the public interest. For example, systems like Ellipsat's offer a cost-effective and rapid means of providing mobile voice service to unserved rural areas, and to cellular subscribers who roam beyond their area of coverage. The subscriber will be able to pick up his cellular telephone and call anywhere in the world, with the equipment automatically accessing an ELLIPSO™ satellite or a terrestrial facility as appropriate to complete the call.

The Commission has acknowledged the public benefits of RDSS and combined voice/RDSS services. In the recently released Report in the WARC proceedings, for example, the Commission recommended that RDSS be upgraded to co-primary status on a world-wide basis.[10] The Commission has also recognized the potential compatibility of mobile voice and RDSS services. For example, it has recommended that the international table of allocations be amended to authorize mobile satellite service in the RDSS bands on a co-primary basis.[11] In addition, in the RDSS Licensing Order, the Commission expressly allowed for the possibility of combined voice/RDSS services in the RDSS bands.[12]

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[10] See Report, General Docket No. 89-554, FCC 91-188, released June 20, 1991, at 15, para. 42.

[11] Id.

[12] See RDSS Licensing Order, supra, 104 F.C.C.2d at 658.

In short, amendment of Rules 2.106 and 25.141, to expand the range of permissible services in the RDSS bands to include mobile voice and data services, would serve the public interest by providing an economic base for RDSS, and facilitating provision of new, publicly beneficial communications services.

III.
THE COMMISSION SHOULD AUTHORIZE OPERATION OF FEEDER LINKS IN THE RDSS BANDS

Commission Rule 25.202(a)(2) provides that fixed-satellite service frequencies "may be used" for links between radio determination satellites and control centers. Feeder links are not expressly precluded in the 1610-1626.5 MHz and 2483-2500 MHz bands. However, Ellipsat seeks clarification and amendment of the rules as necessary to permit feeder link operations in those bands.

In its applications, Ellipsat proposed to operate its feeder links in the same bands as its communications links, or in any other bands the Commission should specify. While Ellipsat is willing and able to conform to whatever the Commission should decide in this regard, it believes that use of the RDSS frequencies for feeder links presents certain benefits in terms of system design. This approach permits a less complex satellite design, by avoiding the need for an additional communication subsystem package, and thus allows satellite cost to be minimized. Ellipsat believes that this approach would provide licensees with the flexibility to design the most cost-effective

system possible. As noted, however, Ellipsat can and will utilize any other frequency bands, including those specified in Rule 25.202(a)(2), for feeder links if the Commission should so direct.

IV.
CONCLUSION

For the foregoing reasons, the Commission should amend its rules if and as necessary (1) to expand the range of permissible services that may be offered in the RDSS bands to include mobile voice and data services; and (2) to permit operation of feeder links in the RDSS bands.

Respectfully submitted,

ELLIPSAT CORPORATION

By Jill Abeshouse Stern

Jill Abeshouse Stern
Eldred D. Ingraham

MILLER & HOLBROOKE
1225 19th Street, NW
Suite 400
Washington, D.C. 20036
(202) 785-0600